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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/086,826	03/04/2002	Shizu Hosono	Q67676	2931

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EXAMINER

CHO, UN C

ART UNIT PAPER NUMBER

2687

DATE MAILED: 06/03/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/086,826

Applicant(s)

HOSONO, SHIZU

Examiner

Un C Cho

Art Unit

2687

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 22 December 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-56 is/are pending in the application.
- 4a) Of the above claim(s) 2,10,15,23,28,36 and 41 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,3-9,11-14,16-22,24-27,29-35,37-40 and 42-56 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04 March 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

**DETAILED ACTION**

***Priority***

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1, 4 – 7, 11, 14, 17 – 20, 24, 27, 30 – 33, 37, 40, 43 – 46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Irvin (US 6,768,909 B1) in view of Lin (US 6,393,292 B1)

Regarding claim 1, Irvin discloses a radio apparatus comprising receiving means for receiving a radio signal (transceiver, Fig. 3a, 44); judging means for judging whether said apparatus can determine its position (position controller, Fig. 3a, 38, determines whether it can determine its position); sending means for sending a message to a sender of said radio signal if said judging means judges that said apparatus cannot determine its position (if the position controller determines that it cannot determine its position sends a message to the cellular system, Fig. 2, 200) (Irvin, Col. 6, lines 4 – 14 and Col. 10, lines 1 – 54).

However, Irvin does not specifically disclose wherein said message comprises the position of the base station located nearest to said radio apparatus. In an analogous art, Lin discloses wherein said message comprises the position of the base station located nearest to said radio apparatus (mobile station transmits to the cellular network a LAI, location area identifier, identifies the physical area in which a mobile station is located such as physical cells, Lin, Col. 1, lines 51 – 55 and Col. 6, lines 22 – 32). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the technique of Lin to the system of Irvin in order to provide a method of transmitting position data via cellular communication system, wherein one can obtain the exact location of any particular cellular phone user through the cellulose phone system.

Regarding claim 4, Irvin in view of Lin as applied to claim 1 above discloses storing means for storing said message (mobile terminal controller (Fig. 3a, 37) inherently has a memory (not shown) to store incoming messages, Irvin, Col. 5, lines 11 – 51).

Regarding claim 5, Irvin in view of Lin as applied to claim 1 above discloses wherein said sending means sends said message even if said radio apparatus can determine its position (Irvin, Col. 8, lines 51 – 62).

Regarding claim 6, Irvin in view of Lin as applied to claim 1 above discloses positioning means for determining the position of said radio apparatus; wherein if said judging means determines that said apparatus can determine its

position, said positioning means determines the position of the radio apparatus and said sending means sends said position to said sender of said radio signal (Irvin, Col. 10, lines 1 – 54).

Regarding claim 7, Irvin in view of Lin as applied to claim 1 above discloses wherein said message indicates that said radio apparatus cannot determine its position (mobile terminal sends an instruction message to the cellular system when its internal GPS receiver fails, Irvin, Col. 10, lines 1 – 13).

Regarding claim 11, Irvin in view of Lin as applied to claim 1 above discloses wherein said radio apparatus is a portable telephone (Irvin, Col. 5, lines 11 – 25).

Regarding claim 14, the claim is interpreted and rejected for the same reason as set forth in claim 1.

Regarding claim 17, the claim is interpreted and rejected for the same reason as set forth in claim 4.

Regarding claim 18, the claim is interpreted and rejected for the same reason as set forth in claim 5.

Regarding claim 19, the claim is interpreted and rejected for the same reason as set forth in claim 6.

Regarding claim 20, the claim is interpreted and rejected for the same reason as set forth in claim 7.

Regarding claim 24, the claim is interpreted and rejected for the same reason as set forth in claim 11.

Regarding claim 27, the claim is interpreted and rejected for the same reason as set forth in claim 1.

Regarding claim 30, the claim is interpreted and rejected for the same reason as set forth in claim 4.

Regarding claim 31, the claim is interpreted and rejected for the same reason as set forth in claim 5.

Regarding claim 32, the claim is interpreted and rejected for the same reason as set forth in claim 6.

Regarding claim 33, the claim is interpreted and rejected for the same reason as set forth in claim 7.

Regarding claim 37, the claim is interpreted and rejected for the same reason as set forth in claim 11.

Regarding claim 40, the claim is interpreted and rejected for the same reason as set forth in claim 1.

Regarding claim 43, the claim is interpreted and rejected for the same reason as set forth in claim 4.

Regarding claim 44, the claim is interpreted and rejected for the same reason as set forth in claim 5.

Regarding claim 45, the claim is interpreted and rejected for the same reason as set forth in claim 6.

Regarding claim 46, the claim is interpreted and rejected for the same reason as set forth in claim 11.

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4. Claims 3, 8, 16, 21, 29, 34 and 42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Irvin in view of Lin as applied to claim 1 above, and further in view of Havinis (US 6,311,069 B1).

Regarding claim 3, Irvin in view of Lin as applied to claim 1 above does not specifically disclose checking means for checking whether said radio signal includes a search request requesting the position of said radio apparatus. In an analogous art, Havinis discloses checking means for checking whether said radio signal includes a search request requesting the position of said radio apparatus (mobile station receives a message and alerts to the user whether is a positioning request, Havinis, Col. 5, lines 27 – 41). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the technique of Havinis to the modified system of Irvin and Lin in order to provide a method to notify the mobile subscriber that he/she is being positioned to enhance the privacy of the mobile subscriber.

Regarding claim 8, Irvin in view of Lin and further in view of Havinis as applied to claim 3 above discloses wherein said message indicates that said radio apparatus rejects said request for its position (Havinis, Col. 6, lines 14 – 22).

Regarding claim 16, the claim is interpreted and rejected for the same reason as set forth in claim 3.

Regarding claim 21, the claim is interpreted and rejected for the same reason as set forth in claim 8.

Regarding claim 29, the claim is interpreted and rejected for the same reason as set forth in claim 3.

Regarding claim 34, the claim is interpreted and rejected for the same reason as set forth in claim 8.

Regarding claim 42, the claim is interpreted and rejected for the same reason as set forth in claim 3.

5. Claims 9, 22 and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Irvin in view of Lin as applied to claim 1 above, and further in view of Havinis et al. (US 2002/0077116 A1).

Regarding claim 9, Irvin in view of Lin as applied to claim 4 above discloses positioning means for determining the position of said radio apparatus (Irvin, Col. 10, lines 1 – 54).

However, Irvin in view of Lin as applied above does not specifically disclose wherein said storing means stores radio apparatus position at a time when said radio apparatus can determine its position and wherein said message comprises the latest radio apparatus position stored in said storing means. In an analogous art, Havinis discloses storing means storing radio apparatus position at a time when said radio apparatus can determine its position and wherein said message comprises the latest radio apparatus position stored in said storing means (Havinis, Page 3, Paragraph 0035 through Paragraph 0038). Therefore, it would have been obvious to one of ordinary skill in the art at the time the



invention was made to provide the technique of Havinis to the modified system of Irvin and Lin in order to provide a mobile station to notify the network of the number and/or duration of positioning performed by the mobile station because this type of information may be useful to the network for charging or statistical purposes.

Regarding claim 22, the claim is interpreted and rejected for the same reason as set forth in claim 9.

Regarding claim 35, the claim is interpreted and rejected for the same reason as set forth in claim 9.

6. Claims 12, 13, 25, 26, 38, 39 and 47 – 56 are rejected under 35 U.S.C. 103(a) as being unpatentable over Irvin in view of Lin as applied to claim as applied to claim 4 above, and further in view of McCrady et al. (US 6,453,168).

Regarding claim 12, Irvin in view of Lin as applied to claim 4 above does not specifically disclose that the radio apparatus receives radio signals from a plurality of senders and said storing means stores a message for each one of the plurality of senders. In an analogous art, McCrady discloses that the radio apparatus (Master Radio, 12 of Fig. 1) receives radio signals from a plurality of senders (REF Radio1 – 4, 14, 16, 18 and 20 of Fig. 1; Col. 7, lines 14 – 19) and storing means (Buffer, 90 of Fig. 7) for storing message for each of the plurality of senders (McCrady, Col. 13, lines 15 – 23). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to

provide the technique of McCrady to the modified system of Irvin and Lin in order to provide system that rapidly, reliably and accurately determines the three-dimensional position of a mobile communication device in a variety of environments, including urban areas and inside buildings where multipath interference can be great.

Regarding claim 13, Irvin in view of Lin and further in view of McCrady as applied to claim 12 above discloses that at least one message stored in the buffer is different from another message stored in the buffer (McCrady, Col. 13, lines 23 – 47).

Regarding claim 25, the claim is interpreted and rejected for the same reason as set forth in claim 12.

Regarding claim 26, the claim is interpreted and rejected for the same reason as set forth in claim 13.

Regarding claim 38, the claim is interpreted and rejected for the same reason as set forth in claim 12.

Regarding claim 39, the claim is interpreted and rejected for the same reason as set forth in claim 13.

Regarding claim 47, the claim is interpreted and rejected for the same reason as set forth in claim 12.

Regarding claim 48, the claim is interpreted and rejected for the same reason as set forth in claim 13.

Regarding claim 49, Irvin in view of Lin and further in view of McCrady as applied to claim 12 above discloses setting means for setting a response hold state if said judging means determines that said radio apparatus cannot determine its position (position controller, Fig. 3a, 38, determines whether the mobile station can determine its position or not, Irvin, Col. 6, lines 4 – 14 and Col. 10, lines 1 – 54); identification means for checking the identification of the sender of said radio signal after said response hold state is set; and reading means for reading the message stored in said storing means after said response hold state is set (McCrady, Col. 13, lines 15 – 23); wherein after said message is read from said storing means, said response hold state ends and said sending means sends said message (mobile station sends a message to the system after the position controller makes the determination that the internal positioning system has failed, Irvin, Col. 6, lines 4 – 14 and Col. 10, lines 1 – 54).

Regarding claim 50, Irvin in view of Lin and further in view of McCrady as applied to claim 49 above discloses wherein said setting means sets said response hold state even if said judging means determines that said radio apparatus can determine its position (position controller determines whether the mobile station can determine its position or not, Irvin, Col. 6, lines 4 – 14 and Col. 10, lines 1 – 54).

Regarding claim 51, the claim is interpreted and rejected for the same reason as set forth in claim 49.

Regarding claim 52, the claim is interpreted and rejected for the same reason as set forth in claim 50.

Regarding claim 53, the claim is interpreted and rejected for the same reason as set forth in claim 49.

Regarding claim 54, the claim is interpreted and rejected for the same reason as set forth in claim 50.

Regarding claim 55, the claim is interpreted and rejected for the same reason as set forth in claim 49.

Regarding claim 56, the claim is interpreted and rejected for the same reason as set forth in claim 50.

### ***Response to Arguments***

7. Applicant's arguments with respect to claims 1 – 56 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within

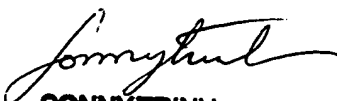
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TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Un C Cho whose telephone number is (571) 272-7919. The examiner can normally be reached on M ~ F 8:00AM to 4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lester Kincaid can be reached on (571) 272-7922. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
**SONNY TRINH**  
**PRIMARY EXAMINER**

Un C Cho  
Examiner  
Art Unit 2687

5/20/05 UC